

VI. CLAIMS

2 WHAT IS CLAIMED IS:

- 3 1. A method of product development and commercialization comprising:
 - 4 (a) determining customer requirements for a product;
 - 5 (b) determining the return on investment of developing said product per
6 said customer requirements;
 - 7 (c) setting final requirements;
 - 8 (d) approving said final requirements;
 - 9 (e) selecting a base technology;
 - 10 (f) modifying said base technology to meet said final requirements;
 - 11 (g) approving said base technology selection and said modifications;
 - 12 (h) testing said modified base technology to verify it meets said final
13 requirements;
 - 14 (i) approving said testing of said modified base technology;
 - 15 (j) checking compliance with at least a portion of the relevant laws and
16 regulations of at least a portion of the jurisdictions where the modified
17 base technology will be made, transported, or sold;
 - 18 (k) approving said assurance of compliance; and

(I) manufacturing/commercializing said modified base technology.

2. The method of claim 1 further comprising storing all data entered, retrieved,
3 processed, created, stored, or modified in one or more central or distributed
4 mutually accessible databases.

5. The method of claim 1 further comprising sending an electronic mail
6 notification to a participant in the method or an interested person upon
7 completion of one of the steps of the method.

8. The method of claim 2, wherein all participants in the method and
9 authorized persons may access at least a portion of said database.

10. The method of claim 4, wherein said access includes a plurality of
11 pre-defined views, thereby permitting quick information sorting.

12. The method of claim 4, wherein said access to said database is available
13 globally from any personal computer having installed thereon a client
14 application configured to perform database management system functions
15 with said database and having a network connection configured to allow
16 communication between said client application and said database.

17. The method of claim 1, wherein the steps are performed sequentially such
18 that a later step is not performed until all earlier steps are completed.

19. The method of claim 7, further comprising locking at least a portion of said
20 steps prior to the completion of all earlier steps and unlocking said steps
21 upon completion of all earlier steps, thereby preventing entering a step out
22 of order without authorization.

1 9. The method of claim 1, further comprising locking at least a portion of said
2 steps after their completion, thereby preventing revision of said steps
3 without authorization.

4 10. The method of claim 1, further comprising terminating the method at any
5 step, wherein said termination prevents further revision of any step in the
6 method.

7 11. The method of claim 1 further comprising a step to maintain version control
8 of said approved final requirements in step (d), said approved base
9 technology selection and modifications in step (g), or said approved
10 qualification of modified base technology in step (i).

11 12. The method of claim 1, further comprising sending an electronic mail
12 notification to a participant in the method or an interested person upon
13 completion of one of the steps of the method.

14 13. The method of claim 1, further comprising recording in said database action
15 items for completing one or more steps of the method, electronically
16 notifying the responsible persons of said actions items, and tracking
17 completion of said action items.

18 14. The method of claim 1, wherein one or more of said steps is at least in part
19 completed by selecting items from a menu, list box, drop down list, or other
20 selection device available in a personal computer graphical user interface,
21 thereby reducing typing time and errors.

22 15. The method of claim 1, further comprising plotting the actual versus
23 planned progress of said steps on a timeline, for measuring and improving
24 performance and productivity of practicing said method.

1 16. A method of product development and commercialization comprising:

2 (a) determining customer requirements for a product;

3 (b) storing said requirements in a computer readable database;

4 (c) determining the return on investment of developing said product per

5 said customer requirements;

6 (d) storing said return on investment in said computer readable database;

7 (e) setting final requirements;

8 (f) storing said final requirements in said computer readable database;

9 (g) approving said final requirements;

10 (h) storing said approval in said computer readable database;

11 (i) selecting a base technology;

12 (j) storing said selection in said computer readable database;

13 (k) modifying said base technology to meet said final requirements;

14 (l) storing information of said modification in said computer readable

15 database;

16 (m) approving said base technology selection and said modifications;

17 (n) storing said approval in said computer readable database;

- (o) testing said modified base technology to verify it meets said final requirements;
- (p) storing information from said testing in said computer readable database;
- (q) approving said testing of said modified base technology;
- (r) storing said approval in said computer readable database;
- (s) checking compliance with at least a portion of the relevant laws and regulations of at least a portion of the jurisdictions where the modified base technology will be made, transported, or sold;
- (t) approving said checking of compliance;
- (u) storing said approval in said computer readable database; and
- (v) commercializing said modified base technology; and
- (w) approving said commercialization and thereby locking all steps of said method, thereby preventing any further revision of said steps.

17. The method of claim 16, further comprising storing all data entered, retrieved, processed, created, stored, or modified in one or more central or distributed mutually accessible databases.

18. The method of claim 16, wherein said access to said database is available globally from any personal computer having suitable client software installed and suitable network connectivity.

1 33. The method of claim 16, wherein at least a portion of said steps comprise
2 copying template forms that are stored in the database thereby insuring
3 data consistency,

4 34. The method of claim 33, wherein said template forms are revisable at any
5 time by authorized administrators and wherein upon said revision the
6 template forms become immediately available for use by future instances of
7 said method.

8 35. The method of claim 16, wherein reference forms are stored in the
9 database and are made available to users thereby providing assistance in
10 completing said steps.

11 36. The method of claim 35, wherein said reference forms are revisable at any
12 time by authorized administrators and wherein upon said revision the
13 reference forms become immediately available for use by future instances
14 of said method.

15 37. The method of claim 16, wherein administration of the database comprises
16 providing, changing or revoking user access, maintaining items in various
17 selection lists, maintaining template forms, reference forms and help forms,
18 and wherein said administration is performed only by authorized persons

19 38. The method of claim 37, further comprising performing said administration
20 in a graphical user interface and wherein said administration does not
21 require knowledge of computing languages.

22 39. A method of product development comprising:
23 (a) determining customer requirements for a product;

1 (b) storing said requirements in a computer readable database;

2 (c) evaluating economics of developing said product per said customer
3 requirements;

4 (d) storing said evaluation in said computer readable database;

5 (e) selecting a base technology;

6 (f) storing said selection in said computer readable database;

7 (g) determining modifications needed of said base technology to meet
8 said final requirements;

9 (h) storing information of said determination in said computer readable
10 database; and

11 (i) testing said determination to verify it meets said final requirements;
12 and

13 (j) storing details and results of said testing in said computer readable
14 database.

15 40. The method of claim 39, further comprising after said storing step (j), a step
16 for commercializing said modifying base technology.

17 41. The method of claim 39, further comprising storing all data entered,
18 retrieved, processed, created, stored, or modified in one or more central or
19 distributed databases.

1 42. The method of claim 39, wherein access to said database is available
2 globally from any personal computer having suitable client software
3 installed and suitable network connectivity.

4 43. The method of claim 39, wherein all participants in the method and
5 authorized persons may access at least a portion of said database, and the
6 graphical user interface presented matches the person's type of database
7 access.

8 44. The method of claim 39, wherein said access includes a plurality of
9 pre-defined views.

10 45. The method of claim 39, wherein the steps are performed in sequentially
11 such that a later step is not performed until all earlier steps are completed.

12 46. The method of claim 45, further comprising locking at least a portion of said
13 steps prior to the completion of all earlier steps and unlocking said steps
14 upon completion of all earlier steps, thereby preventing entering a step out
15 of order without authorization.

16 47. The method of claim 39, further comprising locking at least a portion of said
17 steps after their completion, thereby preventing revision of said steps
18 without authorization.

19 48. The method of claim 39, further comprising terminating the method at any
20 step, wherein said termination prevents further revision of any step in the
21 method.

1 56. A method of product development comprising:

2 (a) determining customer requirements for a product;

3 (b) storing said requirements in a computer readable database;

4 (c) determining if base technology modifications are needed to meet said

5 customer requirements;

6 (d) if base technology modifications are needed to meet said customer

7 requirements, then said method further comprises:

8 (1) selecting a base technology;

9 (2) storing said selection in said computer readable database;

10 (3) determining modifications needed of said base technology to

11 meet said final requirements;

12 (4) storing information of said determination in said computer

13 readable database; and

14 (5) if the cost of said modification exceeds a predetermined amount,

15 then said method further comprises:

16 (a) evaluating economics of developing said product per said

17 customer requirements;

18 (b) storing said evaluation in said computer readable database;

notifying the responsible persons of said actions items, and tracking completion of said action items.

- (b) means for storing, retrieving, searching, modifying, and reporting an evaluation of the economics of developing said product per said customer requirements;
- (c) means for storing, retrieving, searching, modifying, and reporting a selection of a base technology;
- (d) means for storing, retrieving, searching, modifying, and reporting a determination of modifications needed of said base technology to meet said final requirements; and
- (e) means for storing, retrieving, searching, modifying, and reporting testing details and results of said determination to verify it meets said final requirements.

67. A product development and commercialization management information system comprising:

- (a) a collaborative work space, wherein multiple participants can individually and jointly work on a project:
 - (1) configured at least partially automating workflow of product development and commercialization projects from determining customer requirements and financial analysis of project viability, through determining a base technology, determining any needed modifications of said base technology, and testing said modified base technology to verify compliance with customer requirements, and configured for adding/changing the participants in a project;

- (2) configured for assigning, tracking and providing notification of tasks relating to a product development project or group of projects;
- (3) configured for providing a collaborative work space comprising a secure/searchable communication repository linked to product development projects or logical grouping of projects and their tasks, for communications with and between project participants and customers, configured for recording, channeling, and archiving said communications;
- (4) configured for financial tracking and/or forecasting for a project or a logical grouping of projects;
- (5) configured for importing lab data;
- (6) configured for providing a secure and searchable document repository linked to projects or logical groupings of projects, wherein said documents are in final format; and

(b) a database:

- (1) configured for storing a product development project's history and details, said history and details comprising the types of data, time schedules, status of all steps in the project, contact information, results of all steps in the project, and documents and information supporting all steps in the project; and
- (2) configured for searching said stored history and details and for generating reports from same;

1 (c) a network for connecting said collaborative workspace and database;
2 and
3 (d) means for providing for different levels of secure access for different
4 users.

5 68. The system of claim 67, wherein said network comprises the Internet.

6 69. The system of claim 67, wherein said collaborative workspace comprises a
7 client application comprising a web browser.